tuberculosis of the lungs (including acute miliary As a result of a more general undertuberculosis). standing of the laws of health, the importance of fresh air, etc., due in part, no doubt, to the efforts of the various societies for the prevention of tuberculosis, there has been a most marked and gratifying decrease during recent years in the mortality from this scourge of civilization. In only a decade—from 1904 to 1914—the death rate from tuberculosis in all its forms fell from 200.7 to 146.8 per 100,000, the decline being continuous from year to year. This is a drop of more than 25 per cent. Prior to 1904 the rate had fluctuated, starting at 201.9 in 1900. Even yet, however, tuberculosis has the gruesome distinction of causing more deaths annually than any other form of bodily illness except heart diseases, and over 40 per cent. more than all external causes-accidents, homicides, and suicides combined.

Pneumonia (including bronchopneumonia), was responsible for 83,804 deaths in the registration area in 1914, or 127 per 100,000—the lowest rate on record. The mortality rate from this disease, like that from tuberculosis, has shown a marked decline since 1900, when it was 180.5 per 100,000. Its fluctations from year to year, however, have been pronounced, whereas the decline in the rate for tuberculosis has been nearly continuous.

The only remaining death rate higher than 100 per 100,000 in 1914 was that for Bright's disease and acute nephritis, 102.4. The total number of deaths due to these maladies in 1914 was 67,545, more than nine-tenths of which were caused by Bright's disease and the remainder by acute nephritis. The mortality from these two causes innephritis. The mortality from these two causes increased from 89 per 100,000 in 1900 to 103.4 in 1905, since which year it has fluctuated somewhat.

Next in order of deadliness come cancer and other malignant tumors, which filled 52,420 graves in 1914. Of these deaths, 19,889, or almost 38 per cent., resulted from cancers of the stomach and liver. The death rate from cancer has risen from 63 per 100,000 in 1900 to 79.4 in 1914. The increase has been almost continuous, there having been but two years—1906 and 1911—which showed a decline as compared with the years immediately preceding. It is possible that at least a part of this indicated increase is due to more accurate diagnoses and greater care on the part of physicians in making reports to registration officials.

Diarrhea and enteritis caused 52,407 deaths in 1914, or 79.4 per 100,000. This rate shows a marked falling off as compared with the rate for the preceding year, 90.2, and a very pronounced decline as compared with that for 1900, which was 133.2. Nearly five-sixths of the total number of deaths charged to these causes in 1914 were of infants under 2 years of age.

Apoplexy was the cause of 51.272 deaths, or 77.7 per 100,000. The rate from this malady has increased gradually, with occasional slight declines, since 1900, when it stood at 67.5.

Arterial diseases of various kinds—atheroma, aneurism, etc.,—caused 15,044 deaths, or 22.8 per 100,000, in the registration area.

No epidemic disease produced a death rate as high as 18 per 100,000 in 1914. The fatal cases of diphtheria and croup—which are classed together in the statistics, but practically all of which are of diphtheria—numbered 11,786, or 17.9 per 100,000, in that year, the rate having fallen from 43.3 in 1900. This decline of nearly 59 per cent. is relatively greater than that shown by any other important cause of death. The rate has not fallen important cause of death. The rate has not fallen continuously, but has fluctuated somewhat from year to year.

Diabetes was the cause of 10,666 deaths, or 16.2 per 100,000. The rate from this disease has risen almost continuously from year to year since 1900, when it was 9.7 per 100,000.

The mortality rate from typhoid fever has shown

a most gratifying decline since 1900, having decreased from 35.9 per 100,000 in that year to 15.4 in 1914, or by 57 per cent. This decline has been almost as great, relatively, as that for diphtheria, and has been greater than that for any other principal cause of death. The total number of deaths due to typhoid fever in 1914 was 10,185. The marked decrease in the mortality from this disease gives emphatic testimony to the effectiveness of gives emphatic testimony to the effectiveness of present-day methods, not only of cure but of prevention. The efficacy of improved water-supply and sewage systems, of the campaign against the fly, and of other sanitary precautions, is strikingly shown by the reduction of the typhoid mortality rate to the extent of more than five-ninths in 14

### Whooping Cough, Measles, and Scarlet Fever.

The principal epidemic maladies of chilhoodwhooping cough, measles, and scarlet fever—were together responsible for no fewer than 15,617 deaths of both adults and children, or 23.7 per 100,000, in the registration area in 1914, the rates for the three diseases separately being 10.3, 6.8, and 6.6, respectively. In 1913 measles caused a greater o.b., respectively. In 1913 measles caused a greater mortality than either of the other diseases, but in 1914 whooping cough had first place. In every year since and including 1910, as well as in several preceding years, measles has caused a greater number of deaths than the much more dreaded scarlet fever. The mortality rates for all three of these diseases fluctuate greatly from year to year. The rates for measles and scarlet fever in 1914 were the lowest in 15 years while that for 1914 were the lowest in 15 years, while that for whooping cough was considerably above the lowest recorded rate for this disease, 6.5 in 1904, although far below the highest, 15.8 in 1903.

### Railway and Street-Car Accidents.

Deaths due to railway accidents and injuries totaled 7,062, or 10.7 per 100,000. This number includes fatalities resulting from collisions between railway trains and vehicles at grade crossings. death rate from railway accidents and injuries is the lowest on record and shows a most marked and gratifying decline as compared with the rate for 1913, which was 13 per 100,000, and a still more pronounced drop from the average for the five-year period 1906-1910, which was 15 per 100,000.

Deaths resulting from street-car accidents and injuries numbered 1,673, or 2.5 per 100,000. This rate, like that for railway fatalities, is the lowest on record and shows a material falling off as compared with 1913, when it was 3.2, and as compared with the average for the five-year period 1906-1910, which was 3.7.

# Suicides.

The number of suicides reported in 1914 was 10,933, or 16.6 per 100,000 population. Of this number, 3,286 accomplished self-destruction by the use of firearms, 3,000 by poison, 1,552 by hanging or strangulation, 1,419 by asphyxia, 658 by the use of knives or other cutting or piercing instruments, 619 by drowning, 225 by jumping from high places, 89 by crushing, and 85 by other methods.

## THE APRIL MEETING OF THE STATE BOARD OF HEALTH.

The regular monthly meeting of the State Board of Health was held April 1st, in Sacramento. There were present Dr. George E. Ebright, President; Dr. F. F. Gundrum, Vice-President; Dr. Edward F. Glaser, Dr. Robert A. Peers, Dr. Adelaide Brown and Dr. Wilbur A. Sawyer, Secretary.

The State Board of Health decided to continue to furnish lectures on public health and preventive medicine which had been requested by the Univer-

medicine which had been requested by the University of California Medical School.

The Secretary was appointed the delegate of the State Board of Health to the Fourteenth Annual

Conference of State and Territorial Health Authorities with the United States Public Health Service to be held in Washington, May 13th and 15th, 1916.

The Board decided to call a conference of the various departments of the State government and other persons interested in the enforcement of the new milk law which goes into effect October 1st. The President decided to call the conference for Thursday, April 27th, in San Francisco.

The following resolution was passed, putting on official record various previous actions of the Secretaries of the State Board of Health relative to the reporting of communicable disease by health officers. The resolution did not in any way change the existing regulations.

"Resolved, That every local health officer shall report each week to the State Board of Health on the blanks furnished by the Board, the presence of communicable diseases on the published list of diseases whose report is required by law, together with such data as are indicated by the report blanks furnished; and where the health officer has no knowledge of the presence of such diseases, he shall report their absence in the same manner."

A report was received relative to the delinquency of certain health officers in the matter of furnishing the required weekly report of communicable disease. In connection with this matter the following resolution was passed:

"Whereas, Seven out of the two hundred and eighty-five health officers in California have failed to furnish reports of communicable diseases to the State Board of Health, as is required by law, during the first ten weeks of 1916, in spite of repeated communications calling their attention to the law; and

and
"Whereas, It is essential to successful public
health administration in California that prompt reports of communicable diseases be received by the
State Board of Health at weekly intervals from all
health officers in the State: therefore be it

State Board of Health at weekly intervals from all health officers in the State; therefore be it "Resolved, That the Secretary be instructed to take further steps to bring about the reporting of diseases by delinquent health officers, that he notify them of the requirements of the law, and make recommendations to the Board at its next regular meeting regarding any need for legal action to compel the performance of the duties of their office; be it further

be it further

"Resolved, That the names of any remaining delinquent health officers be published in connection
with the minutes of the next meeting."

Mr. Stanley B. Freeborn, Instructor in Entomology at the University of California, was appointed an Inspector of the State Board of Health, without salary from the Board, for services in connection with the malaria and mosquito survey, to hold office from May 1st to September 1st, 1916. Mr. Freeborn will co-operate with Professor W. B. Herms in the proposed joint survey by the State Board of Health and the University of California.

A motion was carried to the effect that the Secretary should be instructed to inform the City of Alameda that inasmuch as the population of the city has exceeded 25,000 that the State Board of Health will discontinue the routine service of the State Hygienic Laboratory on January 1, 1917; and that the City of Alameda be urged to provide for a city bacteriological laboratory before that time.

A report was received from Dr. J. C. Geiger, Assistant Director of the State Hygienic Laboratory, that ophthalmia neonatorum outfits, together with literature regarding legislation on the prevention of this disease, have been distributed to all physicians of California, and that an additional stock has been furnished to the larger health departments and to the 200 depositaries of the State Hygienic Laboratories.

A communication was presented from Dr. W. C.

Hassler, health officer of San Francisco, relative to the possible discontinuance, by the United States Public Health Service, of plague eradicative measures in San Francisco. The following resolution was passed by the Board:

"Resolved, That the Secretary be instructed to communicate with the Surgeon-General of the United States Public Health Service, requesting the continuance of plague eradicative measures in San Francisco and other parts of California; and be it further

"Resolved, That should the United States Public Health Service not see fit to continue its work in San Francisco, it would then devolve upon the local authorities to continue the activities initiated by the United States Public Health Service as a local sanitary measure."

The action of the Secretary in modifying the State quarantine for rabies in Lassen County was confirmed by a vote of the Board. The modification is as follows:

"That owners be allowed to take their dogs off their private premises, provided that such dogs are properly muzzled and held in restraint by leash. Also, that dogs be allowed to run at large during the day upon the private premises of the owner, provided they are at all times under the control of an adult and properly muzzled. At night all dogs to be held under proper control by means of leash or in enclosed cage or paddock."

By formal resolution the Board confirmed the action of the Secretary in endorsing the agreement between the State of California and the State of Nevada relative to the transfer of sheep dogs between Modoc and Lassen counties in California and Washoe County in Nevada.

Relative to the trial of a man charged with exhibiting a deadly weapon in a threatening manner toward an Inspector of the State Board of Health in connection with the rabies campaign in Modoc County, the following resolution was passed and ordered sent to District Attorney Robnett of Modoc County:

"Resolved, That the Secretary be instructed to communicate with the District Attorney, commending his activity and expressing the interest of the Board in the case at issue."

A temporary permit was granted to the City of Calistoga to continue to deposit and discharge the effluent from a septic tank on the four-acre tract east of Napa Creek and also into the creek during the winter months.

A temporary permit was likewise granted to the City of Sonoma to continue to dispose of its sewage by treatment in a septic tank followed by disposal on a sewer farm.

A temporary permit was granted to the City of San Luis Obispo to continue the use of the public water supply pending the carrying out of the recommendations for increased safety contained in the report of Mr. C. G. Gillespie, Director of the Bureau of Sanitary Engineering.

On the basis of a report and the recommendations of the Director of the Bureau of Tuberculosis, the tuberculosis ward of the Fresno County Hospital was approved as eligible for the tuberculosis subsidy.

Regulations for the Prevention and Control of Tuberculosis were read, amended, and adopted.

The following hospitals having been inspected by the Director of the Bureau of Registration of Nurses and found to meet the requirements of the Board were accredited for one year from date, April 1, 1916: Agnew Sanitarium, San Diego; Alameda County Hospital, San Leandro; East Bay Sanitarium, Oakland; Glendale Sanitarium, Glendale; Hahnemann Hospital, San Francisco; Loma Linda Sanitarium, Loma Linda; O'Connor Sanitarium, San Jose; Paradise Valley Sanitarium, National City; Pomona Valley Sanitarium, Pomona.

Certificates as registered nurse were granted to 105 applicants.

A plan for a standard curriculum for nurses' training schools was presented and a committee consisting of Dr. F. F. Gundrum, Dr. Edward F. Glaser, and Dr. Adelaide Brown was appointed to co-operate with the Bureau of Registration of Nurses in considering the manuscript and making any needed amendments.

A resolution was passed approving, in accordance with the recommendations of the Director of the Bureau of Registration of Nurses, the requirements of the Board for accredited training schools for nurses, after minor amendments made at the meeting.

The Board passed a resolution calling the attention of the State Board of Control to the need of careful physical examination of the orphan wards of the State and expressing the opinion of the Board that special provision should be made for children suffering from tuberculosis and other diseases.

Seventy-one cases of alleged violations of the Food and Drugs Act had been set for hearing on this date. Many of the alleged violators were present or were represented by attorneys. After the hearings the cases were judged on their merits and the most of them were referred to the local district attorneys for prosecution.

### RAILROAD "DAYS."

In other lines of business or employment and under federal and state law there is but one standard of measurement, and that is "time," and an 8-hour day means 8 hours work, and a "day" means a day.

It is very different on a railroad. In train and engine service there are two standards of measurement—time and miles—and whichever will produce the more pay is the one used by employees to determine their wages. In freight service, on mountain districts on runs of over 100 miles, 10 hours or less, or 100 miles or less, constitutes a day. In freight service through practically level country 8 hours or less, or 100 miles or less, constitutes a day. A "day," therefore, may mean that an engineer worked 10 hours, or 8 hours, or 5 hours, or 3 hours, or no hours at all; or it may mean that he ran 100 miles, 50 miles, 25 miles or no miles at all—as an engineer on an assigned run who, because of slack business, bad weather or like conditions, fails to make full time, must be paid full time regardless of the fact that on some of these "days" he performed no work.

For example, if an engineer in valley freight service was 8 hours on the road but in that time ran only 50 miles he would be paid for a "day," as 8 hours or less constitutes a "day." If on the other hand he ran 100 miles in 3 hours he would be paid for a "day" although he only worked 3 hours, as 100 miles or less also constitutes a "day." If he ran 200 miles in 6 hours he would be paid for 2 "days" although he only worked 6 hours.

In main line passenger service a "day" means 5 hours or less, or 100 miles or less. If an engineer ran 300 miles in 9 hours he would be paid for 3 "days" although he only worked 9 hours, as 100 miles or less constitutes a day. If for any reason movement of his train was delayed and it took him 10 hours to run 100 miles he would be paid for 2 "days" as 5 hours or less, also constitutes a day, and whichever basis will yield the more pay, is the one used in determining the amount of pay.

#### IN ERRATA.

In the 27th edition of the Official Register and Directory of Physicians and Surgeons, in the body of the book, the name of Dr. Samuel W. Means of 600 Stockton Street, San Francisco, was omitted. Dr. Samuel W. Means is a duly qualified and licensed physician of the State of California, having graduated from the Medico-Chirurgical College of Pa., '02 (C) '03, and is a member of the San Francisco County Medical Society.

### PASO ROBLES.

After extensive alterations and the installation of new equipment, the hotel at Paso Robles Hot Springs will be re-opened under new management on February 15th, thus making again available to the public one of California's famous spas. Paso Robles Hot Springs is midway between San Francisco and Los Angeles on the Southern Pacific Coast line and its waters are said to be possessed of healing and restorative powers equal to those of Carlsbad, Baden-Baden and other foreign spas to which Americans have journeyed unmindful of what their own country possessed.

The hotel was built because the springs were there. The reputation of the waters started with the Indians long before the patient padres of a Catholic conquest of the "unfaithful parts" of California. Padre Lasuen—when his mission at San Miguel, a short distance from the springs, was founded—wrote to the Court of Spain about the virtues of the waters and years ago they were known to European physicians.

The environment at the spa this year is one as well for rest and recreation as for the cure of disease or the quieting of shattered nerves. The big bathhouse is connected with the hotel by an arcade running from the solarium of the hotel. It is equipped with the latest appliances and discoveries of the application of water and mud. There is a plunge, medical offices and directory and on the exterior tennis courts, croquet-grounds, and a club house with tenpins, billiards and broad lanais for lounging. The waters are of various kinds-the moor muds or peats, through which flow a constant supply of sulphur waters; sulphurous and alkaline pools, soda, iron or chalybeate, sulphur-andlithia, varying in temperature from 60° to 122° Fahrenheit.

## PNEUMONIA.

Ten per cent. of the deaths in the United States result from pneumonia. It is estimated that during the past thirty days this rate has been doubled in some sections. Tuberculosis and heart disease, each causing one-ninth of all fatalities, are the only diseases which outrank pneumonia among the legion of the men of death, but in certain cities pneumonia is steadily increasing and even has surpassed the mortality from tuberculosis. Seventy per cent. of all cases occur between December and May. It is distinctly a cold weather infection, seemingly brought by wintry blasts, but especially prevalent during the winter season only because its